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Coatings for Concrete  
and Masonry

# MasterProtect<sup>®</sup> C 250

Water-based 100% acrylic coating

FORMERLY THOROSHEEN<sup>®</sup>

## PACKAGING

5 gallon (18.9 L) pails

## YIELD

See yield chart on page 2.

## STORAGE

Store in unopened containers in a clean, dry area. Protect from freezing.

## SHELF LIFE

18 months when properly stored

## VOC CONTENT

Less than 100 g/L, less water and exempt solvents.

## DESCRIPTION

MasterProtect C 250 is a smooth, water-based, 100% acrylic primer and coating for concrete and masonry. It provides long-term protection against wind-driven rain, fungus, and mildew growth.

## PRODUCT HIGHLIGHTS

- 100% acrylic formula forms a smooth, durable film with excellent long-term adhesion
- Resists wind-driven rain, helping prevent water penetration
- Breathable to permit water vapor to escape
- UV resistance provides excellent color retention for a long-lasting, attractive finish
- Low VOC content for broad compliance to local and regional regulations
- Can be used as an acrylic primer. Provides uniform background color before top coat applications

## APPLICATION

- Exterior
- Vertical and overhead surfaces
- Above grade
- Protection and aesthetics

## SUBSTRATES

- Concrete
- Masonry
- Cement plaster
- Stucco
- EIFS
- Previously coated structures
- Fiber Cement Board

**TECHNICAL DATA**

**COMPOSITION**

MasterProtect C 250 contains water, acrylic emulsion, fillers, and other proprietary ingredients.

**TEST DATA**

PROPERTY	RESULTS	TEST METHODS
<b>Density</b> , lbs/gallon (kg/L)	11.8 (1.41)	ASTM D 1475
<b>Solids by weight</b> , %	56.5	ASTM D 5201
<b>Solids by volume</b> , %	38	ASTM D 5201
<b>Viscosity</b> , KU	105 – 110	ASTM D 562 (Stormer)
<b>Resistance to wind-driven rain</b>	Meets requirement – no water penetration when applied in 2 coats or in 1 coat over MasterProtect FL 749 Block Filler	TT-C-555B
<b>Artificial weathering and UV resistance</b> , Xenon Arc, 5,000 hours	Passed	ASTM G 26
<b>Water-vapor permeance</b> , perms	19	ASTM E 96
<b>Flexibility</b> , 1/4" mandrel	Passed	ASTM D 1737
<b>Mildew resistance</b>	Meets requirement – no growth at 21 days at 28 °C (Apsergillus niger)	TT-P-29G, Federal Standard 141 B, Method 6271
<b>Flash point</b> , (°F °C)	> 200 (> 93)	Lab Method
<b>Algae resistance</b>	No growth	ASTM D 5589

Test results are averages obtained under laboratory conditions. Reasonable variations can be expected.

**YIELD**

RATE FT <sup>2</sup> /GAL (M <sup>2</sup> /L)	WET FILM MILS (MM)	DRY FILM MILS (MM)
175–275 (4.30–6.75) As a primer	N/A	N/A
250 (6.1) Re-coat only	6 (0.15)	2 (0.05)
200 (4.8)	8 (0.2)	3 (0.08)
100 (2.4)	16 (0.41)	6 (0.15)

**HOW TO APPLY**

**SURFACE PREPARATION**

1. Surfaces should be clean and sound and free of all bond-inhibiting contaminants.
2. Concrete substrates should be fully cured.
3. Repair any holes, spalled and damaged concrete with appropriate Master Builders Solutions repair materials. Allow appropriate cure time prior to coating.
4. Remove any protruding concrete accessories and smooth out any surface irregularities.
5. High-pressure power wash surface (or abrasive blast on hard, dense surfaces) to create a profile of SP3, per ICRI Guide 310.2.
6. Some stains may require chemical removal. Neutralize any cleaning compounds used and rinse with clean water.

7. Check adhesion of old coatings according to ASTM D 3359, Measuring Adhesion by Tape Test Method A.
8. Remove any blisters or delaminated areas and sand edges to smooth rough areas and provide transition to old paint areas.
9. MasterProtect C 250 is not a crack filling or crack bridging coating. For substrates with cracks, refer to MasterProtect EL 750 product data sheet.
10. Chalky surfaces should be primed with MasterProtect P 100 or MasterProtect P 200.

**MIXING**

1. Prior to use, mix MasterProtect C 250 at slow speed with a drill and mixing paddle to ensure uniform color and to minimize air entrapment.
2. In multi-pail applications, mix the contents of each new pail into the partially used pail

to ensure color consistency and smooth transitions from pail to pail.

**APPLICATION AS A PRIMER**

1. Apply MasterProtect C250 by brush, spray, roller, or spray-and-backroll
2. Maintain primer uniform wet-film thickness (WFT) to ensure proper sealing of substrates.

**APPLICATION AS A TOPCOAT**

1. Apply MasterProtect C 250 by brush, spray, roller, or spray-and-backroll.
2. Maintain proper uniform wet-film thickness (WFT) during application to ensure the performance characteristics desired (See yield rates section).
3. Always work to a natural break and maintain a wet edge during application.
4. For uniformity of color, application techniques must be consistent throughout the project.

#### ROLLER

1. Use a quality 3/4 – 1 1/4" nap roller cover.
2. Completely saturate the roller and keep it loaded with the coating to build the required mils. Never dry roll.
3. Cross roll, maintaining a wet edge, to achieve uniform thickness. Backroll in one direction for consistent appearance.

#### SPRAY

1. Equipment is available for spraying MasterProtect C 250. Contact equipment manufacturer for further recommendations.
2. Backrolling in one direction after spray application is recommended to achieve uniform film thickness.

#### BRUSH

1. Application by brush is recommended only for small, inaccessible areas, e.g., on touch-ups.
2. Use only nylon brushes.

#### DRYING TIME

Times assume 70 °F (21 °C) and 50% relative humidity.

To touch: 1 – 2 hours

To recoat: 2 – 4 hours

To full cure: 5 days

Lower surface or air temperatures and higher relative humidity can extend dry time.

#### CLEAN UP

Clean all tools and equipment immediately with water. Cured material may be removed by mechanical means.

#### FOR BEST PERFORMANCE

- Do not apply when temperature (substrate or ambient) is 40 °F (4 °C) or below or expected to fall below 40 °F (4 °C) within 24 hours after application.
- Do not apply if rain is expected within 24 hours.
- Not for immersion service.
- Not intended for use as a horizontal traffic-bearing coating.
- Apply a 4 by 4 ft (1.2 by 1.2 m) test area to verify acceptable color and adhesion before proceeding with any project. The test method for measuring adhesion is ASTM D 3359, Measuring Adhesion by Tape, Method A. On the 0 – 5 scale, a minimum adhesion rating of 4A is required.

- Color formulas containing organic colorants are susceptible to fading in exterior applications. Refer to Technical Support for guidance.
- Do not thin the material.
- For professional use only; not for sale to or use by the general public.
- Make certain the most current versions of product data sheet and SDS are being used; visit [www.master-builders-solutions.com/en-us](http://www.master-builders-solutions.com/en-us) to verify the most current version.
- When used as a primer, the coverage rate is 175–275 ft<sup>2</sup>/gal (4.30–6.75 m<sup>2</sup>/L). Coverage will vary depending on surface texture and porosity.
- Proper application is the responsibility of the user. Field visits by Master Builders Solutions personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

#### HEALTH, SAFETY AND ENVIRONMENTAL

Read, understand and follow all Safety Data Sheets and product label information for this product prior to use. The SDS can be obtained by visiting [www.master-builders-solutions.com/en-us](http://www.master-builders-solutions.com/en-us), e-mailing your request to [mbsbscst@mbcc-group.com](mailto:mbsbscst@mbcc-group.com) or calling 1(800)433-9517. Use only as directed.

**IN CASE OF EMERGENCY: Call CHEMTEL +1 (800) 255-3924 or if outside the US or Canada, +1 (813) 248-0585.**

#### LIMITED WARRANTY NOTICE

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